



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,225	12/16/2003	N.R. Gandhi	5334-CIP-CON	6331

22922 7590 08/08/2006

REINHART BOERNER VAN DEUREN S.C.
ATTN: LINDA KASULKE, DOCKET COORDINATOR
1000 NORTH WATER STREET
SUITE 2100
MILWAUKEE, WI 53202

EXAMINER

WEIER, ANTHONY J

ART UNIT PAPER NUMBER

1761

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/737,225

Applicant(s)

GANDHI ET AL.

Examiner

Anthony Weier

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 12-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 12-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5, 12-15, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 02076550 taken together with Hsieh et al.

JP 02076550 discloses a process of preparing a soy composition wherein pulverized soybeans are treated with acid (e.g. citric acid) and water (either with the acid or additionally alone in a later step) wherein it is expected that the amount of water added (approximately 2.5:1 with the soy) would provide a material with liquid consistency.

JP 02076550 is silent regarding the dimensions of the pulverized soybeans, the step of treating the liquid soybean mixture to a pressure greater than 2000 psi, and the step of heating the liquid above 50 C (and 90-95 C in claim 14). Hsieh et al teaches preparation of a soy milk composition including the steps of crushing the soybean, adding heated water, and eventually treating the created slurry to a pressure greater than 2000 psi. Hsieh et al further teaches the water added is heated to 70-90 C for several reasons including it use to dissociate protein globules to permit improved emulsification (col. 3, lines 10-13). It would have been obvious to one having ordinary

Art Unit: 1761

skill in the art at the time of the invention to have incorporated the addition of water which has been heated to such extent in the process of JP 02076550 for such reason. In addition, Hsieh et al teaches the advantage of using powdered soybean to increase the rate of heat transfer and reduce the processing time required for conventional heat soaking of whole beans (col. 2, lines 14-16). Though JP 02076550 already discloses the treatment of pulverized soybeans, Hsieh et al provides a reason for doing same and provides suggestion via such teaching as to why one would vary the degree of pulverization. More specifically, as for the particle size, it would naturally flow from the teachings of Hsieh et al that size reduction of the soybean relates to heat transfer/processing time as a result effective variable, and it would have been further obvious to have arrived at the particular soybean particle size as called for in the instant claims depending on, for example, the degree of heat transfer and processing time desired. And although JP 02076550 is silent regarding a homogenization step, such is further taught, for example, in Hsieh et al (e.g. col. 2, lines 40-43; col. 3, lines 37-50). In general, it would have been further obvious to have incorporated such homogenization step to provide for a more homogeneous product as a matter of preference. As for homogenizing at the high pressure called for in the instant claims, Hsieh et al teaches that homogenization of 1000 psi to 3000 psi will provide "satisfactory" homogenization of the soybean slurry. It would have been further obvious to have employed homogenization at, for example, 8000 psi in the process of JP 02076550 to provide a "satisfactory" homogenization as taught by Hsieh et al.

Claim 15 further calls for the addition of a fat or oil material. Although JP

Art Unit: 1761

02076550 is silent regarding same, Hsieh et al teaches the well known inclusion of, for example, corn oil in soybean beverages. It would have been further obvious to have included same as a matter of preference among conventional ingredients.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 02076550 taken together with Hsieh et al and Drachenberg et al.

JP 02076550 and Hsieh et al are silent regarding the use of at least one of a stabilizer, suspension agent, emulsifier, or combination of same. However, Drachenberg et al teaches the preparation of a similar soybean composition wherein emulsifier is added to hold existing soybean oil in suspension in the final product (see col. 5, lines 47-50). It would have been obvious to one having ordinary skill in the art at the time of the invention to have included same to provide a more uniform product.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 02076550 taken together with Hsieh et al and any one of Crank et al, Jolivet et al, and Wagner et al.

JP 02076550 is silent the limitations of claim 6. Although Hsieh et al further discloses that homogenization may be repeated, there is no suggestion that same be done at a lower pressure on a subsequent treatment as called for in claim 6.

Nevertheless, two-stage homogenization using a first pressure greater than a second pressure is notoriously well known in liquid processing (including that of soybean-related materials). For example, Crank et al teaches treatment of a soybean concentrate at a high pressure followed by a lower pressure (col. 12, lines 34-58).

Jolivet et al (e.g. col. 2, lines 19-25; Example 1) and Wagner et al (e.g. Example 1) each

teach the two-stage homogenization of a soybean composition using a first pressure greater than the second. Absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of the invention to have employed such two-stage, two-pressure, homogenization in the process of JP 02076550 (modified with Hsieh et al) as an art recognized alternative for treatment of soybean compositions.

5. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 02076550 taken together with Hsieh et al and Koga et al.

The claims further call for a product which is spray dried into a powder. However, it is notoriously well known to spray processed dry soy milk into powders for future preparation as a beverage as taught, for example, by Koga et al (see Abstract). Absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of the invention to have done same as a conventional, art recognized alternative product form that may be easily reconstituted to prepare a beverage.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 02076550 taken together with Hsieh et al and either one of Burr or Crank et al.

Claim 16 further calls for the addition of another milk ingredient. It is notoriously well known to combining milk with soy milk in creating beverages as taught, for example, by either one of Burr (see claim 1) or Crank et al (col. 3, lines 10-27). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed said soy milk product in conjunction with cow milk as a matter of preference

Art Unit: 1761

depending on, for example, consideration of a healthier drink, availability of ingredients, and cost of ingredients.

Response to Arguments

7. Applicant's arguments filed 7/24/06 have been fully considered but they are not persuasive.

Applicant appears to disagree with the motivation provided in the rejections above. It should be noted that motivation does not have to expressly articulated in the references themselves, but must be something that naturally flows from the teaches set forth therein. Moreover, this motivation does not have to be the same as Applicant's motivation in providing the solution to a problem. In other words, even though the references may fail to evince an appreciation of the problem identified and solved by an applicant, this, standing alone, is notconclusve evidence of the nonobviousness of the claimed subject matter. Clearly, references may suggest doing what an applicant has done even though workers in the art were ignorant of the existence of the problem discovered and solved by an applicant. In re Gershon et al, 152 USPQ 602; In re Graf, 145 USPQ 197.

Applicant argues that the primary reference JP '550 teaches away from using temperatures of 50 C or higher as lecithin is "eliminated" as a result. As evidence, Applicant further refers to a translation of JP '550 but none is found in the record. Nevertheless, even if JP '550 teaches away from the use of 50 C or greater, it should be noted that Hsieh discloses the use of temperatures as low as "about 50" which clearly include the use of a temperature below (albeit just below) 50 C. Thus, Hsieh does set

Art Unit: 1761

forth a temperature that does not teach away from the alleged requirement in JP '550 that the temperatures of 50 C and greater not be used.

Applicant further inquires whether or not the rejections set forth above with regard to JP '550 and Hsieh are based on facts within the Examiner's personal knowledge. No, the references have been applied employing a plain reading of same while considering the instant claims as broadly as possible and wherein the motivation applied, where not expressly articulated, is considered to fall within the general knowledge of one skilled in the art.

All other arguments have been addressed in view of the rejections as set forth above.

European Search Report References

8. The European search report references accompanying the IDS submitted 3/6/06 have been considered. In particular, the X references (as well as Y references) would not provide for a rejection any better than that set forth above since none of same disclose the particular soybean ground wherein same is than incorporated with an acid and water under a temperature and pressure as called for in the instant claims.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 1761

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

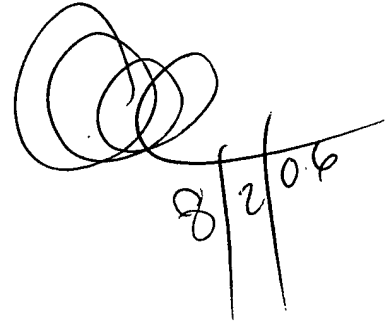
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/737,225
Art Unit: 1761

Page 9

Anthony Weier
August 2, 2006

Anthony Weier
Primary Examiner
Art Unit 1761

A handwritten signature consisting of several overlapping loops, followed by the date 8/2/06 written in a vertical format with slashes.